Chapter 2 - General Design Concepts

INTRODUCTION

R★STARS is designed to satisfy the changing accounting needs of a diverse set of users in both large and small governmental organizations. The system provides a standardized approach to accounting events, strict financial controls, and efficient use of computer resources. Frequently, the objective of providing maximum flexibility conflicts with objectives of control and efficiency. This chapter discusses the concepts and methodologies used in R★STARS to achieve the objective of maximum flexibility while maintaining control and efficiency.

2.1 INTEGRATION OF MAJOR ACCOUNTING FUNCTIONS

R★STARS has been designed to satisfy the major accounting requirements that are the responsibility of a governmental entity. These requirements are addressed through a number of functional accounting capabilities included in the system. For example, R★STARS contains the high level information necessary to maintain general ledger level data on each of the user's funds, the medium level information needed to perform appropriation and agency budget accounting, and the detailed information required for program and organization accounting.

An important concept embodied in the design of R★STARS is the integration of all system functions into a single system structure. For example, many governments may have separate systems for preparing budgets, recording receipts, tracking agency budgets, and performing cost allocations. As depicted on page 2.2-2, R★STARS integrates each of these functions into one set of standardized software which utilizes the same financial data base and input transactions. By integrating all major functional accounting requirements, governments save on the cost of separate systems, and the amount of manual intervention required to enter data, generate reports, and perform reconciliations.

All appropriate R★STARS financial tables are updated when each transaction is posted. As a result, the data entry process is reduced significantly and the need to reconcile the outputs of more than one system is virtually eliminated. More importantly, the system provides the user with a vehicle for the integration of all information into a single, comprehensive system for planning, monitoring, and evaluating the performance of vital programs and projects.

Additionally, R★STARS is designed to be a system that will provide uniformity and consistency in systemwide accounting and reporting, provide flexibility at the agency level to satisfy agency requirements, and minimize the impact on user agencies.

2.2 SINGLE TRANSACTION CONCEPT

Under the single transaction concept, the full range of classification data affected by the transaction and the impact it has on all of the system's tables are identified at the time a transaction is recorded. In this manner, the overall accounting impact of a transaction is recognized in the system as a result of a single entry. It is not necessary, therefore, to record a transaction several times to reflect an agency's appropriation, a fund's general ledger, and the balance of an outstanding encumbrance. All of this information is contained in a series of R★STARS financial tables which are updated simultaneously as the result of a single entry into the system as shown on the next page.

Use of single transaction processing also makes it possible to avoid the manual coding of certain transaction classification data that repeat the data already classified on a previously entered transaction. Those transactions that reference a previously entered document automatically look-up the pertinent classification data from the prior transaction. For example, accounts payable and encumbrance liquidations may be entered on a single transaction. This technique significantly reduces the effort required for manual coding and keying as well as subsequent system reconciliation.

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SINGLE TRANSACTION CONCEPT

General Ledger Accounts
Organizational Structure
Program Structure
Classification Structure
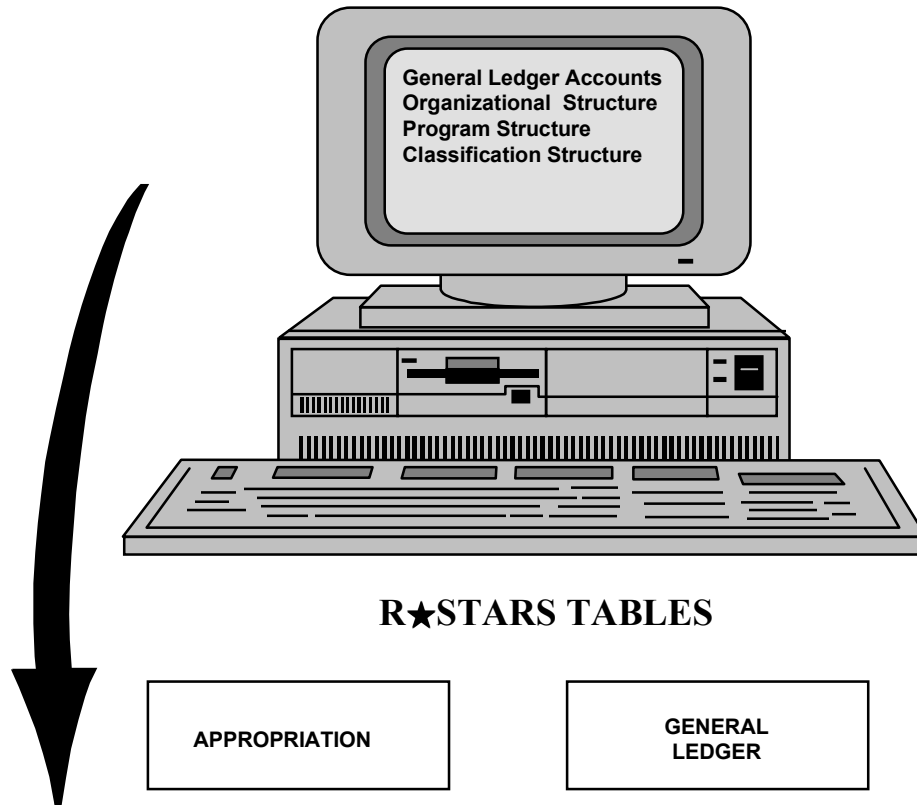
R★STARS TABLES

APPROPRIATION	GENERAL LEDGER
AGENCY BUDGET	ACCOUNTING EVENT
CASH CONTROL	GRANT
CASH FORECAST	PROJECT
DOCUMENT	SUMMARY GENERAL LEDGER

2.3 DATA EDIT, VALIDATION, AND CONTROL

To ensure the accuracy of the accounting information, a variety of edit and validation criteria must be met before transactions are posted to R★STARS. The transactions with data that do not pass the edit and validation criteria must be identified as being in error and either placed on a suspense file for correction or corrected on-line before being accepted by the system.

Data entering R★STARS is edited to ensure its accuracy. The types of edits performed include:

- ■ Transactions are checked to verify that data fields are present or absent depending on the rules established for individual transactions, including performing relationship edits among data elements.

- ■ Coding block elements and other data elements are verified to determine if they are allowable or acceptable values for specific transaction types.

- ■ Coding block elements are verified for validity against values maintained in system profiles.

- ■ Transactions are validated against various profiles to determine acceptable balances or limits.

- ■ Fund control edits for appropriations, agency budgets, grants, projects, and cash.
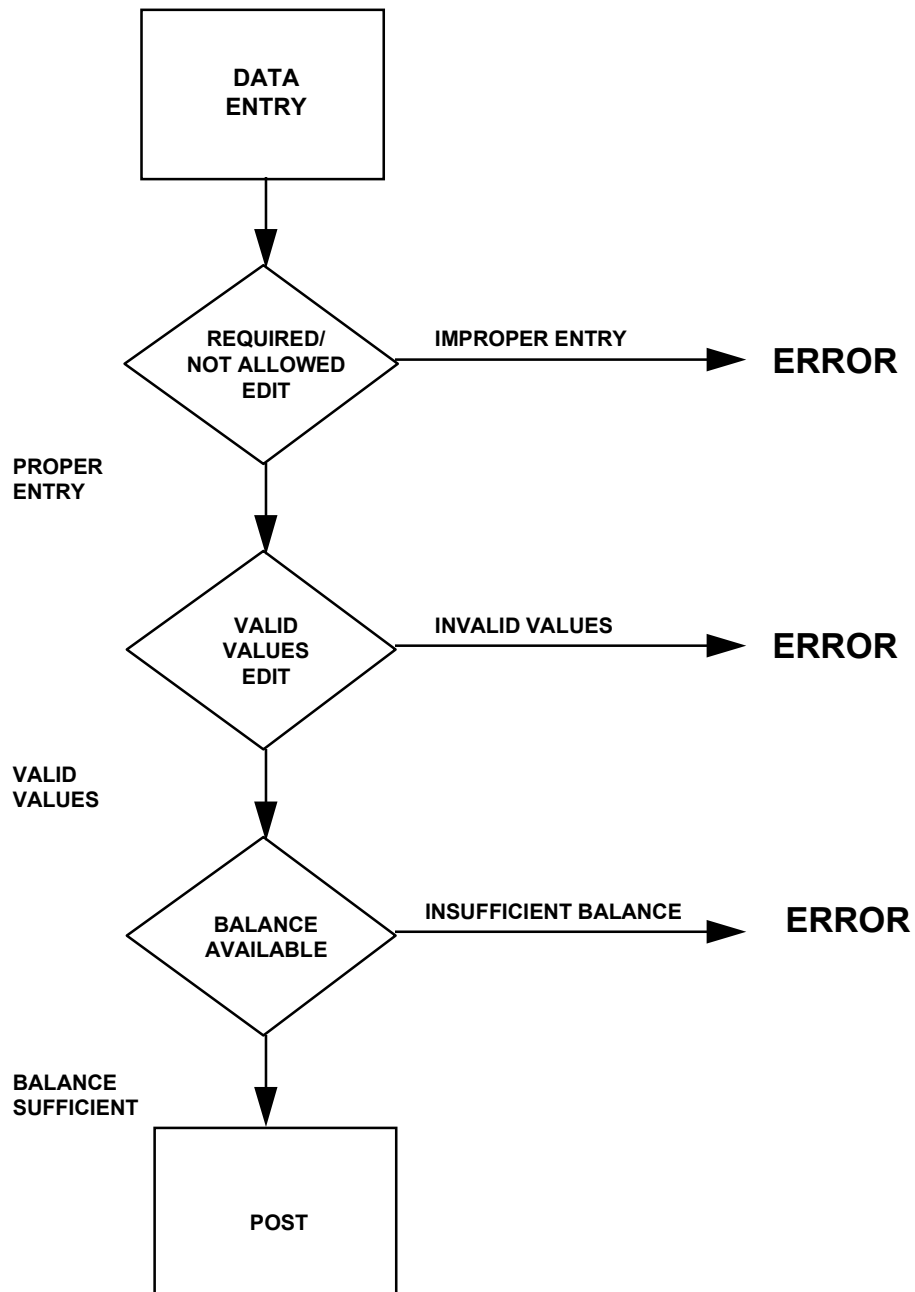
The sequence of these edits is depicted on page 2.3-2.

The nature and extent of editing and validation is determined by the edit and posting rules for the transaction contained in the 28A Transaction Code Decision Profile. This permits edits to be applied based on the type of accounting event being recorded in the system.

R★STARS has the built-in flexibility to permit the user to specify certain types of error edits as being "fatal" (will not post), "warning" (will post but a warning message will be displayed) or "ignored" (no message is displayed). This special feature provides user-controlled flexibility and is primarily used for fund control edits.

The system contains an extensive set of error codes and messages which indicate the specific edits individual transactions have failed. This information is displayed on-line and reported on a series of error reports generated by the system. The user may access the On-line Help facility which automatically displays information related to the first and subsequent error codes generated.

EDIT AND VALIDATION

```
                    ┌─────────────┐
                    │    DATA     │
                    │    ENTRY    │
                    └──────┬──────┘
                           │
                           ▼
                         ╱   ╲
                        ╱     ╲
                       ╱REQUIRED╲    IMPROPER ENTRY
                      ╱ NOT ALLOWED╲──────────────────▶  ERROR
                       ╲  EDIT  ╱
                        ╲     ╱
                         ╲   ╱
     PROPER                │
     ENTRY                 ▼
                         ╱   ╲
                        ╱     ╲
                       ╱ VALID ╲      INVALID VALUES
                      ╱ VALUES  ╲──────────────────▶  ERROR
                       ╲ EDIT  ╱
                        ╲     ╱
                         ╲   ╱
     VALID                 │
     VALUES                ▼
                         ╱   ╲
                        ╱     ╲
                       ╱ BALANCE╲   INSUFFICIENT BALANCE
                      ╱AVAILABLE ╲──────────────────▶  ERROR
                       ╲       ╱
                        ╲     ╱
                         ╲   ╱
     BALANCE               │
     SUFFICIENT            ▼
                    ┌─────────────┐
                    │             │
                    │    POST     │
                    │             │
                    └─────────────┘
```

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2.4 DECISION PROFILE CONTROL

The use of the Transaction Code Decision profile (28A) is fundamental to the processing cycle. This profile allows the user to define the accounting rules for every accounting transaction which drives the computer programs. As a result, there is little accounting logic contained in the programs. Since the Transaction Code Decision profile is a system profile, entries may be added, changed, or deleted by a standard profile maintenance transaction. Consequently, the system maintains a high degree of flexibility in adapting to unique requirements and changes.

The Transaction Code Decision profile contains accounting and editing logic for each accounting event. The accounting events are identified by a transaction code which defines the general ledger impact (debit and credit accounts) and postings to the financial tables. The transaction code also defines whether specific data elements are required, optional, or not allowed.

This profile is maintained centrally to monitor and control the processing of data in the system to ensure that accounting rules are applied consistently to all agencies. Agencies with unique accounting requirements should coordinate the development of new transaction codes with the appropriate R★STARS personnel.

2.5 USE OF PROFILES TO ENSURE SYSTEM ADAPTABILITY

Recognizing that governmental organizations are dynamic in nature, the accounting systems that serve them must be readily adaptable to change. Changes in a system can best be accommodated if the rules that control the processing of the system and the valid codes acceptable for various conditions are maintained in a series of profiles rather than being "hard-coded" into the system's programs. Consequently, change can be accomplished by modifying the profiles rather than by modifying the programs. Modifying the profiles is a more effective and efficient method of changing system values, as page 2.5-3 illustrates.

The system makes maximum use of profiles to control processing and to indicate valid codes and conditions. In particular the Transaction Code Decision profile, described previously, contains all of the posting and most of the edit and validation rules for each transaction processed by the system. Similarly, all of the valid codes for each of the elements in the classification structure are also maintained in system profiles. These codes can be added, changed, or deleted by accounting personnel through profile maintenance activity without requiring reprogramming of the system. This enables R★STARS to be extremely flexible and adaptable. Refer to the Data Entry Guide for more information on profiles.

Certain profiles control posting levels for budgetary and expenditure information. These posting level indicators control such variables as object, program, fund and organization. To maintain consistent posting, posting level indicators should not be changed after financial transaction posting for a fiscal year begins.

If it is necessary to change posting level indicators, it may be necessary to reverse any transactions entered prior to the change(s). The reversing entries must be entered before any profile changes are made.

At the end of a fiscal year, the MAIN FACS systems (R★STARS and ADPICS) will be prepared for the closing of the current fiscal year, as well as the opening of the new fiscal year. System programs that execute a roll-over process, from the old to the new year, will be run, which will set up the Indexes, PCA's, Organization Codes, Program Codes, and Agency Object Codes for the new fiscal year.

Profiles for which the effective end date contains a value other than blank will be rolled over and set up for the new year. For example, if the effective end date on the profile had a value of 09/30/1995 before the roll-over, it also contained 09/30/1995 after the roll-over.
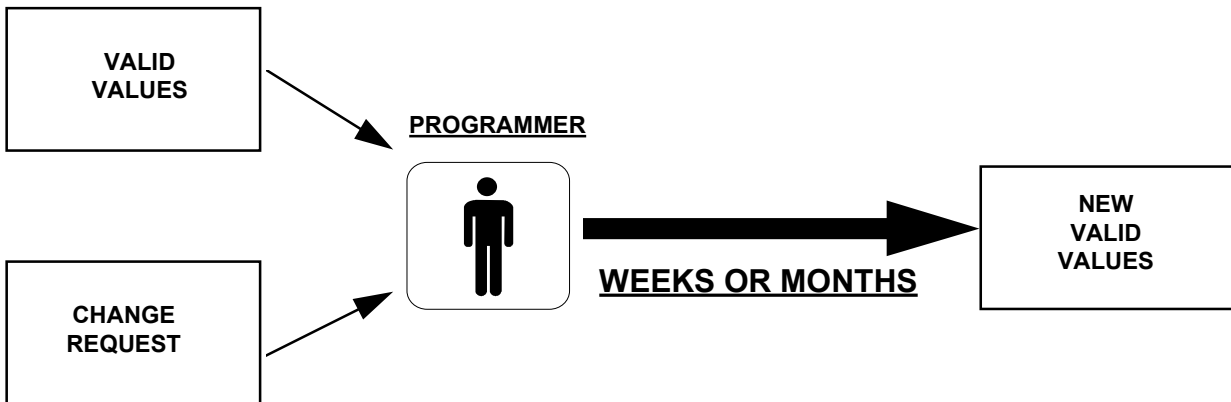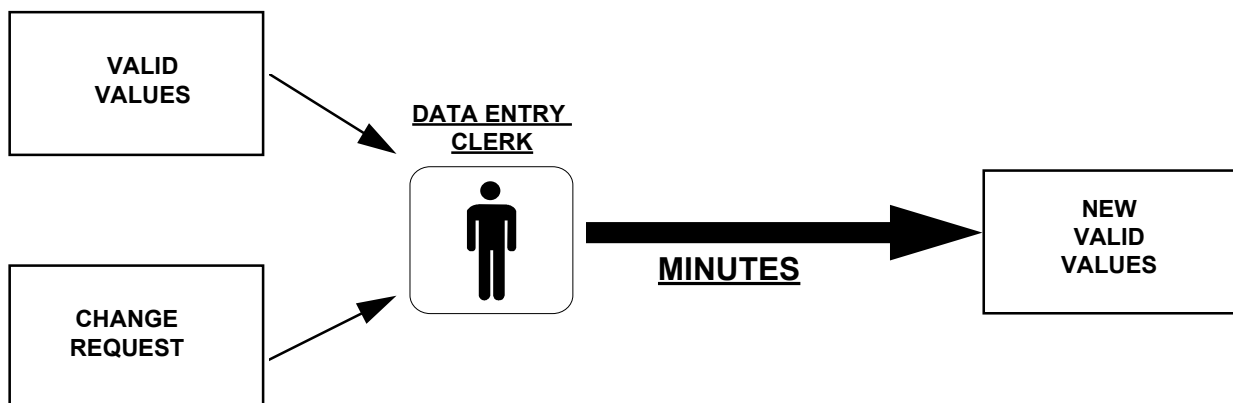
The effective date on profiles should be left blank unless the profile is no longer needed. When a program is discontinued, the associated profiles should contain the date the program is discontinued or will no longer be used. In cases where a profile is no longer required and should not be rolled over to the new fiscal year, the status should be changed from "A" (active) to "I" (inactive).

HARD-CODED VS. PROFILE-DRIVEN SYSTEM

HARD-CODED SYSTEM

```
┌──────────┐
│  VALID   │────────╲
│  VALUES  │         ╲      PROGRAMMER          ┌──────────┐
└──────────┘          ╲     ┌──────┐            │   NEW    │
                       ──▶  │  👤  │ ══════════▶│  VALID   │
┌──────────┐          ╱     └──────┘            │  VALUES  │
│  CHANGE  │         ╱       WEEKS OR MONTHS    └──────────┘
│ REQUEST  │────────╱
└──────────┘
```

PROFILE-DRIVEN SYSTEM

```
┌──────────┐
│  VALID   │────────╲
│  VALUES  │         ╲    DATA ENTRY            ┌──────────┐
└──────────┘          ╲   CLERK                 │   NEW    │
                       ──▶  ┌──────┐            │  VALID   │
┌──────────┐          ╱     │  👤  │ ══════════▶│  VALUES  │
│  CHANGE  │         ╱      └──────┘            └──────────┘
│ REQUEST  │────────╱        MINUTES
└──────────┘
```

2.6 SIMULTANEOUS PROCESSING OF MULTIPLE ACCOUNTING PERIODS

The system is structured to allow posting to multiple accounting periods simultaneously. This feature provides users with the ability to post both January and February transactions, for example, in the same processing run. Similarly, the system provides the ability to post to two different fiscal years at the same time. Users may post to current year transactions while prior year transactions are still being processed.

This multiple-period posting capability is provided through the maintenance of a series of data and amount fields in each table, enabling significant flexibility in reporting. The system can provide reports reflecting balances for the following points in time:

- Balances as of the last processing date.

- Balances to date during the current month and year.

- Balances as of the end of the previous accounting month/year (before or including year end adjustments).

- Balances as of the end of the second previous accounting month/year.

In addition, on-line inquiry capabilities allow users to view financial balances of system tables for any month in the year. Users also control the timing associated with "closing" at month and year end. For example, the records can be held open to process a late payroll without stopping the processing of current month transactions.

2.7 COMPLETE AUDIT TRAIL

"Audit trail" refers to the manner in which a particular element of data existing in the system tables can be traced back to its source or forwarded to its posting position in a report. All financial transactions which have successfully passed specified edit criteria, have posted to the system financial tables and have been released and paid (if applicable), and posted to the Transaction History Table.

Each transaction in the table is uniquely identified and contains the data originally entered, plus the additional data retrieved from the system profiles and appended to the transaction. Although the History Table provides a complete audit trail of data processed in the system, the accounting source documents and the financial reports are also integral parts of the audit trail.

The DAFR9900 Profile Maintenance Log report provides the audit trail for profile maintenance transactions. Each time a transaction is entered to update one of the profiles, it is reported on this activity report. Page 2.7-2 shows the basic flow of data from source documents, through the system, to the appropriate tables and reports.

AUDIT
TRAIL

SOURCE
DOCUMENTS

ERROR
REPORT

REPORTS

R★STARS

FINANCIAL
TABLES

PROFILE
LISTINGS &
ACTIVITY
REPORTS

HISTORY
TABLE
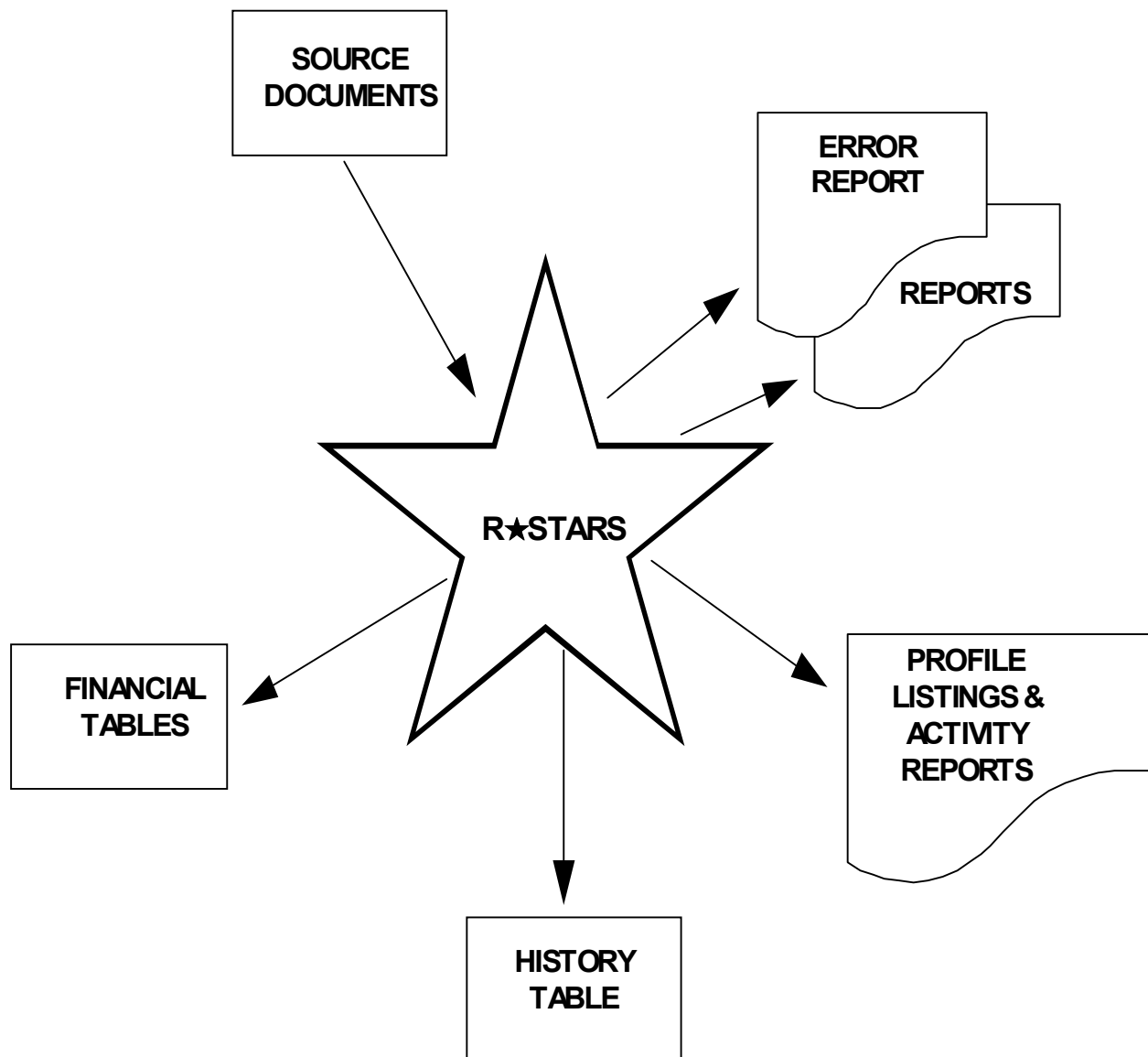
2.8 SYSTEM MANAGEMENT

Special techniques are included in R★STARS to ensure that the system is functioning properly. Such system safeguards are provided through the application of the 97 System Management profile, which is designed to provide control information for and about the overall processing of the system. Accordingly, the System Management profile performs the following important functions:

■ Controls the particular accounting years and/or fiscal months available for posting on a systemwide basis. The last closed indicators provide the ability to keep multiple months and years open for processing financial transactions.

■ Control document processing during year end close.

■ Indicates the current date status of the system through indicators which are automatically updated based on information contained in the D61 Current Date profile. The data elements for which these indicators are set are current fiscal year, current month, effective date, and time. These indicators are important to ensure that the proper versions of the financial tables are used each time the system is run.

■ Maintains control information, such as current and prior cycle processing times and dates, which improves the audit trail of individual transactions posted in the system.

■ Controls weekly, monthly, quarterly, annually and inactive Accounting Event reporting.

■ Contains the number of days in advance of the current effective date that warrant and direct deposit transactions can be selected for payment.

■ Controls when cost allocation, grant and project billing, labor distribution, tax offset, year end closing, recurring transactions, and the fixed asset subsystems are run on a systemwide basis.

■ Contains the backup withholding percent that is used to calculate a vendor's tax liability.

■ Contains next available Archive Reference numbers for transmittals and non-transmittals.

R★STARS also includes an Agency Control profile which maintains system management information for each agency. The 25 Agency Control profile performs the following agency level functions:

- Maintains indicators controlling the processing of the Cost Allocation Subsystem and other subsystems.

- Maintains the billing deficit accounts that relate to the project billing capability in the system.

- Contains an indicator which determines whether the agency uses agency object and if so, for what classification of objects (e.g., revenue, expenditures, or both).

- Maintains indicators which determine at what level documents must match for encumbrances and pre-encumbrances.

- Identifies whether an agency captures fixed assets and indicates thresholds for capitalization and inventory.

- Identifies default accounts for default classifications such as index, program cost account, comptroller object, and agency object. The default classifications are used if a code is required by the transaction code but it is either not entered or is entered incorrectly during transaction entry.

- Indicates last month and year closed for financial posting purposes.

- Indicates reporting month and year.

- Controls document processing at month end.

Through the use of reports generated from these profiles, personnel charged with the responsibility of running the system are able to easily determine that the system is performing properly and that all input and output transaction and financial profile counts reconcile.

D61 CURRENT DATE PROFILE INPUT CODING INSTRUCTIONS

The D61 Current Date profile defines all valid dates used in the system and includes a series of indicators which control system processing. Records with an agency of '000' are established for systemwide processing. Records with a specific agency number in the key are used by document tracking reports only.

Control Key

■ **Agency**   Enter the three digit Agency code, or enter '000' for systemwide dates. If other than '000' is entered, it must exist in D02 Agency profile. Only agencies using document tracking for document exception reporting should establish dates in this profile.

■ **Current Date**   Enter the eight digit current date in MMDDYYYY format. The month must be from 1 to 12, day must be from 1 to 31 and year must be greater than 1989. If month equals '02', allow '01' to '29' day. If month equals '04', '06', '09' or '11' allow '01' to '30' for day. If the fiscal month equals '13' allow '01' to '99' for day. This edit allows for year end close adjustment entries.

Information Elements

■ **Title**   Enter the current date title up to 50 characters. For example, 'January 24, 1994'.

■ **Next Eff Date**   Enter the 8 digit next effective date. It must be greater than the current date. It should be the next date a normal batch cycle will be run.

■ **Type of Day**   Enter the one character Type of Day indicator as follows:
W — Weekday
E — Weekend

■ **Fiscal Month**   Enter the two digit fiscal month. If entered, it must be from 01 to 13.

■ **Fiscal Year**   Enter the two digit fiscal year.

■ **Fiscal Julian**   Enter the three digit fiscal julian day. If entered, it must be between 001 and 367. The first day of the fiscal year should be entered as '001'.

Holiday Indicators

■ **Federal**　　Enter a one character Federal Holiday indicator as follows:
　　　　　　　Y—Yes, the current date is a Federal Holiday.
　　　　　　　N—No, the current date is not a Federal Holiday.

■ **State**　　Enter a one character State Holiday indicator as follows:
　　　　　　　Y—Yes, the current date is a State Holiday.
　　　　　　　N—No, the current date is not a State Holiday.

■ **Bank**　　Enter a one character Bank holiday indicator as follows:
　　　　　　　Y—Yes, the current date is a Bank Holiday.
　　　　　　　N—No, the current date is not a Bank Holiday.

■ **Market**　　Enter a one character Market Holiday indicator as follows:
　　　　　　　Y—Yes, the current date is a Market Holiday.
　　　　　　　N—No, the current date is not a Market Holiday.

■ **Leap Year**　　Enter a one character Leap Year indicator as follows:
　　　　　　　Y—Yes, the current date is a Leap Year.
　　　　　　　N— No, the current date is not a Leap Year.

End of Period Indicators

■ **Week**　　Enter a one character week end as follows:
　　　　　　　Y—Yes, the current date is the end of the week.
　　　　　　　N— No, the current date is not the end of the week.

■ **Month**　　Enter a one character month end as follows:
　　　　　　　Y— Yes, the current date is the end of the month.
　　　　　　　N— No, the current date is not the end of the month.

■ **Quarter**　　Enter a one character quarter end as follows:
　　　　　　　Y—Yes, the current date is the end of the quarter.
　　　　　　　N—No, the current date is not the end of the quarter.
　　　　　　　If 'Y' is entered, month must also be 'Y'.

■ **Year**　　Enter a one character year end as follows:
　　　　　　　Y—Yes, the current date is the end of the year.
　　　　　　　N—No, the current date is not the end of the year.
　　　　　　　If 'Y' is entered, month or quarter must also be 'Y'.

■ **Status Code** Enter a one character status code as follows:
A—Active
I—Inactive
This code will default to an Active status if not entered. It may be used to inactivate records no longer in use

■ **Eff Start Date** Enter the eight digit effective start date (MMDDYYYY format), which identifies when the record becomes effective. This field can be left blank, which will cause the record to be immediately available.

■ **Eff End Date** Enter the eight digit effective end date (MMDDYYYY format), which identifies when the record is no longer effective. This field can be left blank.

```
SD61 2.0                      R★STARS ACCOUNTING          08/15/94 12:00 PM
LINK TO:                      CURRENT DATE PROFILE                     FACS


                 AGENCY:        (MUST BE 000 OR IN D02 AGENCY PROFILE)
           CURRENT DATE:
                  TITLE:
          NEXT EFF DATE:
            TYPE OF DAY:        (W=WEEKDAY, E=WEEKEND)
           FISCAL MONTH:
            FISCAL YEAR:
           FISCAL JULIAN:       (STARTING WITH 001 AS 1ST DAY OF FISCAL YEAR)
     HOLIDAY INDICATORS:            FEDERAL:        STATE:      BANK:
                                    MARKET:     LEAP YEAR:
          INDICATE IF CURRENT DATE IS THE END OF ANY PERIOD BELOW (Y/N):
          TRAVEL PERIOD:
                   WEEK:
                  MONTH:
                QUARTER:
                   YEAR:                              STATUS CODE:
    EFF START DATE:          EFF END DATE:        LAST PROC DATE:


F1-HELP F3-DEL F5-NEXT F9-INT F10-SAVE F11-SAVE/CLEAR ENTER-INQ CLEAR-EXIT
```

General System Management

The system management procedures described in the preceding section are important to the smooth operations of R★STARS. In addition to these procedures, there are a number of 'System Management' activities that should occur to avoid potential financial reconciliation problems. These procedures are described in the following paragraphs.

Transaction Error Management

Transactions which have been identified as being in error require constant review by the agency. It is very important that the number of remaining errors be kept at a reasonable level since transactions in error are not reflected in the R★STARS financial tables or management reports. Error transactions are represented on DAFR2151 R★STARS Error Report.

The importance of the number of errors becomes even more critical when a month end closing approaches. At that time special emphasis should be placed on clearing the errors so that the balances used for the month end processes are as accurate as possible. For example, if an agency that performs an intra-agency billing using the Project Billing subsystem has disbursement errors, the agency is unable to bill for the total cost of services performed during the month.

Another problem with a large number of errors at month end is that it can delay closing if the errors must be cleared before certain month end processes can be performed. Moreover, if the errors are not cleared before closing, then error correction transactions will be required not only to correct the errors, but also to change each transaction's effective date to one which will be valid in the new accounting month. Refer to Chapter 11 in the Reference Manual for specific information on correcting error transactions.

Financial Table Reconciliation

Two requestable reports are provided to assist in the reconciliation process. They are DAFR8450 System Reconciliation Report and DAFR8480 System Reconciliation Exceptions Report. These reports are the primary source for determining if the financial tables are in balance. Each report is discussed below.

DAFR8450 System Reconciliation Report - This report is intended to be used by the R★STARS System Managers to monitor the primary and secondary tables and ensure they are in balance with each other. This report is generated at the agency level and contains balances for only specified Comptroller General Ledger Accounts. The financial tables reflected on this report are: Accounting Event, General Ledger, Summary General Ledger, Appropriation, and Document.

All general ledger accounts on the report must balance across each of the tables. Not all general ledger accounts post to all the financial tables. However, every general ledger account must post to both the Accounting Event and General Ledger tables. For example, general ledger account 2700 Appropriation Control posts to the Appropriation table but not the Agency Budget or Document tables. Therefore, the report should show the same balance for general ledger account 2700 in the Accounting Event, General Ledger, Summary General Ledger and Appropriation tables, and no balance should be reflected in the Agency Budget and Document Financial tables. It should be noted that general ledger account 0281, Interfund Received From General Revenue, posts to the Accounting Event and General Ledger Tables only. This report reflects balances for the month as well as year-to-date balances.

DAFR8480 System Reconciliation Exception Report - This report is similar to DAFR8450. However, it only shows those general ledger accounts which are out of balance within an Agency and Fund. If no general ledger accounts are out of balance, the report will be generated with the message 'No exceptions noted'.

These two reports are imperative to maintaining control over the financial tables. The DAFR8450 Report should be reviewed on a weekly or monthly basis. The DAFR8480 Report must be checked every work day by agency personnel. It is important to find out-of-balance conditions on a timely basis so that a prompt investigation of the problem can begin. The most common problems discovered by reviewing these reports are:

- Transaction codes which have been setup incorrectly (e.g. posted to the wrong balance type) or have been changed once they have been used.

- System posting problems to one of the financial tables (Accounting Event or General Ledger).

System Parameters Profile

The purpose of the D54 System Parameters profile is to allow certain values for programs to be maintained in a table rather than being hard-coded. Tablizing values in D54 serves two purposes. First, it allows common installation-specific changes to be made without modifying source code. Second, the presence of a table entry serves as a reminder which identifies the values which should be reviewed and possibly changed at installation time.

For most users, access to the D54 profile should be limited to no access or inquiry only. Only qualified system administration personnel who understand the impact of changing values in this profile should be given update authority.

The D54 profile has the following key elements:

■ **Table ID**   The table ID is an element, up to 4 characters, which identifies a group of related entries in the D54 profile.

■ **Key 1, Key 2**   The three generic Key fields are each 20 characters long. They can hold
   and Key 3   any appropriate value depending on the needs of the program(s) which will use the entry. See examples of typical uses below.

In addition, the D54 profile has the following informational elements:

■ **Title**   The title contains a description of the purpose of the table entry.

■ **Reference**   The reference data field is a generic 55-character area which may hold one
   Data   or more data element values as needed by the program that uses the table entry. See examples of typical uses below.

As further clarification, the following examples have been provided to show how the D54 profile is used:

   ■ **Example 1**: Program DAFM406 generates interface transactions. From installation-to-installation values like the batch type, current document type and transaction code may vary. The following D54 profile entries are used to supply these values:

Table ID	Key 1	Key 2	Key 3	Reference Data	Title
BTYP	DAFM406	Blank	Blank	M	CMIA A/R Batch Type
DTYP	DAFM406	Blank	Blank	AR	CMIA A/R Document Type
TCOD	DAFM406	Blank	Blank	280	CMIA A/R Transaction Code

A convention has been established that key 1 usually contains the program ID of the program which will be using the parameter. This makes the D54 profile entries easier to trace. In addition, since batch types, document types and transaction codes are such common values to change, a convention has been established that they are each assigned their own table ID. By doing this, it is easier to review all batch types in use systemwide since they appear together in the table.

   ■ **Example 2**: Program DAFM310 selects all transactions from the Document Financial table which represent accounts receivable documents. This is done by selecting based on document type, but there may be multiple document types which are considered accounts receivable. The following D54 profile entries are used to supply these values:

Table ID	Key 1	Key 2	Key 3	Reference Data	Title
DTYP	DAFM310	AR	Blank	Blank	A/R Document Type - Fees for Services
DTYP	DAFM310	A1	Blank	Blank	A/R Document Type - License Fees
DTYP	DAFM310	A2	Blank	Blank	A/R Document Type - Sale of State Property

■ **Example 3**: Program DAFM900C selects data for reporting. The D54 profile is used to specify certain report specific information. A separate entry exists for each report produced by DAFM900C (and its subprograms) as follows:

Table ID	Key 1	Key 2	Key 3	Reference Data	Title
REPT	DAFR	Blank	Blank	*See below	Report Parameters

The Reference Data field contains several parameters associated with the report as follows:

■ **Cols 1-8**: Program ID of the Extract Subprogram to be called from DAFM900C

■ **Col 9**: Call-When-Zero flag. A "Y" value indicates that DAFM900C should call the Extract Subprogram even if the given financial data record contains zero dollar amounts.

■ **Cols 10-13**: The length (in bytes) of the Extract record to be written. Note that the Extract file is defined with variable length records in order to save space.

■ **Cols 14-30**: File Switches. There are 17 file switches, each of which is assigned to a particular financial file. A "Y" value for a given switch indicates that the associated Extract Subprogram requires data from that financial file.

'Generic' coding instructions for this profile begin on the next page.

D54 SYSTEM PARAMETERS PROFILE INPUT CODING INSTRUCTIONS

The D54 System Parameters profile contains values that drive system processes. Due to the nature of data, the profile should be maintained under tight control.

Control Key

- **Table ID**   Enter up to a four character table ID. This ID identifies table values the system accesses during system processes. For example, a table ID of 'ACTN' may indicate action codes that programs access and apply during system processing.

- **Key 1**   Enter up to a 20 character key 1. Key 1 further defines the process the system performs. For example, if the table ID is 'ACTN' the key 1 may be 'dunning notice'. This record indicates the action code to be used during the dunning notice process.

- **Key 2**   Enter up to a 20 character key 2. Key 2 further defines the process the system performs. For example, if the table ID is 'ACTN' the key 1 may be 'dunning notice', and key 2 may be 60. This record indicates the action code to be used during the dunning notice process.

- **Key 3**   Enter up to a 20 character key 3. Key 3 defines in even further detail the process the system performs.

Information Elements

- **Title**   Enter up to a 40 character title which describes the record.

- **Reference Data**   Enter up to 55 characters for reference data. The reference data indicates the value the system uses when the conditions defined by the table ID and keys are met. For example, if the table ID is 'ACTN', key 1 is 'dunning notice', key 2 is '60', and the reference data is '123', the system will use action code 123 during the 60 day dunning notice process.

- **Status Code**   Enter a one character status code as follows:
  A — Active
  I — Inactive
  This code will default to an Active status if not entered. It may be used to inactivate records no longer in use.

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■ **Eff Start Date** Enter the eight digit effective start date (MMDDYYYY format), which identifies when the record becomes effective. This field can be left blank, which will cause the record to be immediately available.

■ **Eff End Date** Enter the eight digit effective end date (MMDDYYYY format), which identifies when the record is no longer effective. This field can be left blank.

```
SD54 2.0                        R★STARS ACCOUNTING        08/15/94 12:00 PM
LINK TO:                     SYSTEM PARAMETERS PROFILE                  FACS




              TABLE ID:
                 KEY 1:
                 KEY 2:
                 KEY 3:

                 TITLE:

          REFERENCE DATA:




                                                  STATUS CODE: A
   EFF START DATE: 05261994   EFF END DATE:       LAST PROC DATE:


F1-HELP F3-DEL F5-NEXT F9-INT F10-SAVE F11-SAVE/CLEAR ENTER-INQ CLEAR-EXIT
```

Reference Manual
General Design Concepts

2.9 SECURITY

The R★STARS Security System is designed to prevent unauthorized access and updates to the system data base through the on-line R★STARS functions. On-line R★STARS functions include data input, profile maintenance, inquiry and report request capabilities. The system uses a two-level approach to secure access into the R★STARS system. The first level of security emphasizes maximum use of the security features provided by the on-line software, **RACF**. The second level of security is provided by the R★STARS software.

R★STARS requires that each user have an operator ID to log onto the system. This operator ID is contained in a security profile which directs the R★STARS system to allow or prohibit the user from performing specific R★STARS functions.

All users posting or approving transactions in ADPICS need to have an R★STARS user class of 99. Otherwise, they will receive a security error message at the bottom of the screen and the transaction will not post to R★STARS or be submitted for approval processing in ADPICS.

Individuals responsible for posting direct vouchers and vouchers to R★STARS from ADPICS need to have a bank ID or a range of bank IDs on the 96A Security Profile for R★STARS 99 user class. This bank ID(s) identifies the disbursement bank.

Three areas of security are provided by R★STARS:

- Functional Processing Control
- Normal Hours Restrictions
- Agency and Organization Restrictions

Each area is described in greater detail in the following paragraphs. For further information on user classes, please refer to the DMB Office of Financial Management (OFM) Security Manual.

Functional Processing Control

Security Profile indicators identify the level of access permitted for each function. Each of the R★STARS profiles has a unique indicator in the 96B Security profile which contain the following values and control the following functions:

- Blank — No access
- 0 (zero) — Inquiry only
- 1 — Inquiry, add and change
- 2 — Inquiry, add, change and delete
- 3 — Inquiry and add *

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* A value of "3" is valid on the systemwide vendor profiles only.

Other indicators contained in the 96A Security profile allow the performance of processes. These indicators are set to either "on" or "off" and include:

- Fund override
- Prior year post
- Prior month post
- View Bank Information

Additional indicators allow for processing transactions. These indicators control the types of transactions a user can enter, the mode that such transactions can be entered in, and if a user can release transactions once entered. These indicators are:

- Batch Edit Mode
- Accounting Transaction Flag
- Release Flag
- User Class

Bank Code Function

Indicators are also provided to specify which Bank ID a user is authorized to use primarily in payment transaction processing. A user's security profile can be established to allow the use of one Bank ID or a range of Bank IDs, as well as establish a default Bank ID.

Printer IDs

Security Profile indicators are provided to allow certain types of documents on specific printers and define a default printer for the user. Indicators can be established to allow printing to a certain printer for the following document types:

- Default
- Local Payment
- Deposit Slips
- Receipts

Normal Hours Restrictions

For security purposes, users of R★STARS may also be limited to using the on-line system functions during normal working hours of normal working days. The Work Hour Range fields of the Security profile indicate the hours of the day in which an operator can access the system. The range is based on a 24-hour clock. For example, a range of "0800 - 1700" indicates that a user can access the system from 8:00 a.m. through 5:00 p.m. The work day field of the Security profile indicates the types of days in which a user can access the system.

Agency and Organization Restrictions

The 96A Security profile also identifies the agency(s) for which a user may perform system functions. The 96A Security profile contains the following agency data elements:

■   Batch Agency
■   Agency Ranges
■   Security Agency

The Batch Agency is defined on the D02 Profile. If the Agency type is "B" (batch agency), the D02 record may only be used as a batch agency. The other Agency type, O, Other, may be used as a batch agency *and* financial agency. The batch agency is used as part of the series key elements on the Internal Transaction file, the Accounting Event Table, and the History file. The batch agency is used in forming the batch ID (batch agency, batch date, batch type, and batch number) and the transaction ID (batch agency, batch date, batch type, batch number, and sequence number). A number of the daily transaction reports sort by the batch ID and these reports have the batch agency as the primary sort sequence. These reports include the following:

■   DAFR2151 Error Report
■   DAFR2251 Posted Transaction Detail
■   DAFR2261 Daily History Detail

In addition to these reports the following screens are sorted by batch agency:

■   520 View A Batch
■   530 View Batch Headers
■   540 Batch Error Corrections

The Agency range section of the security profile determines the range of agencies that are valid for the user.

Agency defaults for profile maintenance. Whenever a user performs profile maintenance the agency that defaults as the "key" agency is the Security Agency from the 96A Security Profile. If the Security Agency is "000" the user must enter the agency in the key to the profile for either inquiry or add/change/delete maintenance.

Agency defaults for batch agency on batch header entry. Whenever a user enters transactions on the 500 Batch Header Screen the agency that defaults as the Batch Agency is the batch agency from the 96A Security Profile. The batch agency on the 96A Security Profile is the first agency on the first row of enterable elements on the screen and follows the elements user ID/user class.

Agency defaults for financial agency and document agency on transaction data entry. The system defaults the financial agency on the transaction to the Security Agency from the 96A Security Profile if the Security Agency is not "000". If the Security Agency is "000" the financial agency is blank, this indicates the user must enter the financial agency.

The document agency value on accounting transaction data entry defaults to the value of the batch agency on the user's 96A Security Profile.

Both agency values may be overridden by the user with authorization for other agencies.

Organization Code restriction within a single Financial Agency. In addition, users can be restricted to levels of internal organization as defined on the D03 Organization Code Profile within an agency. The elements on the 96A Security profile that are used to control internal organization security are: Security Organization. Up to two Security Organization codes may be entered. Any level of Organization Code may be entered. For example, an Organization Code at level 1 would likely provide access to a number of Organization codes whereas an Organization code at level 7 would likely restrict access to a fewer number of organization codes.

Users who are defined as R★STARS Central operations personnel are not restricted by agency for inquiries against accounting transactions.

The default action code agency and action code are used by several programs to update the Document Header and Document Tracking Tables.

Whenever a user enters or requests financial reports or enters transactions, the user is limited to accessing and updating data for the agency(s) identified in the security record.

R★STARS SECURITY

USER

OPERATOR ID
AND PASSWORD

R★STARS

OPERATOR CLASS,
APPROVAL LEVEL
AND AGENCY

AUTHORIZED
ACCESS

INQUIRY
OR
UPDATE

ACCOUNTING
TRANSACTION
ENTRY

REPORTING
&
INQUIRY
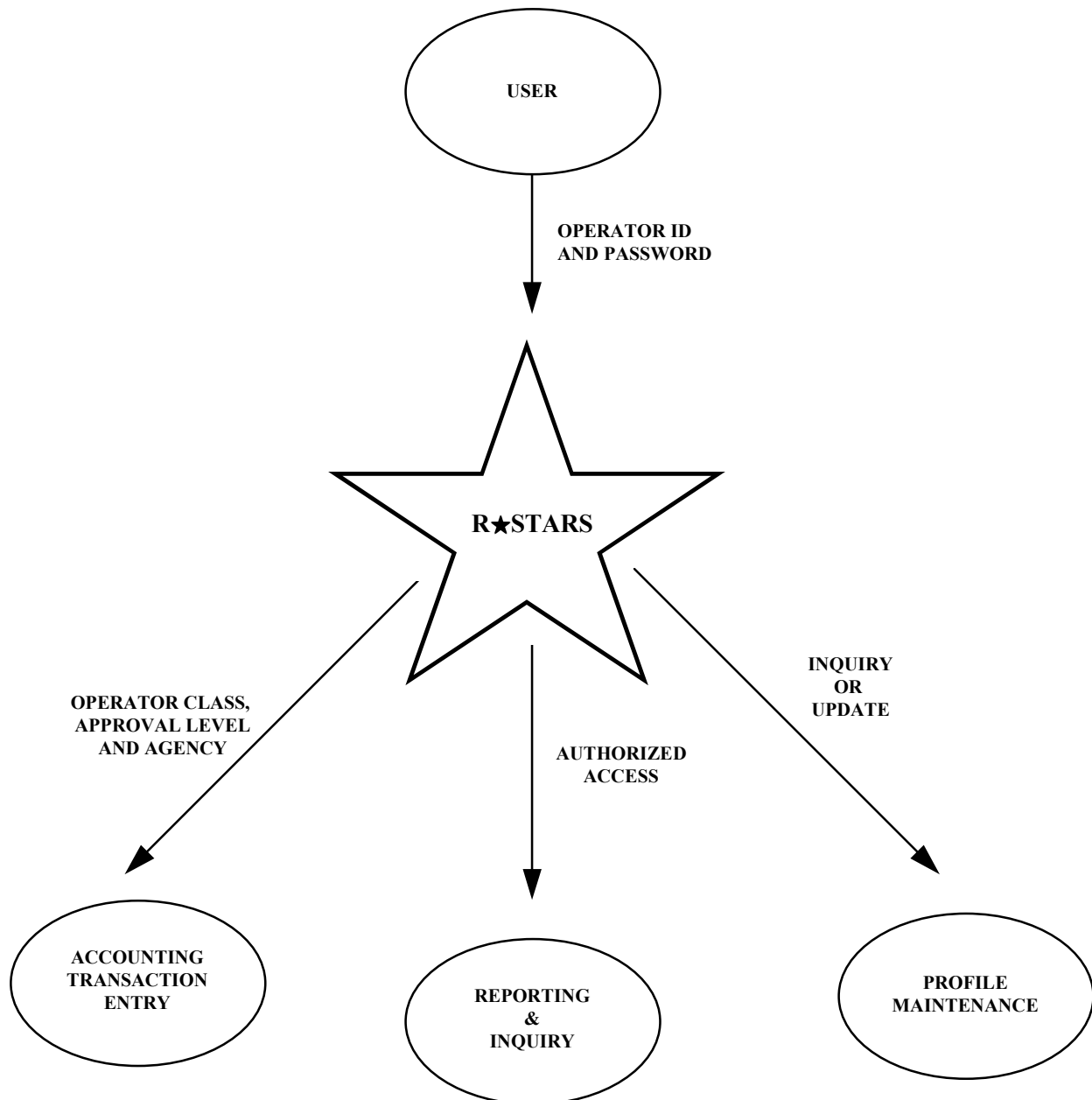
PROFILE
MAINTENANCE

Access and Application Security

R★STARS requires that each user provide a valid CICS User ID and password in order to log-in to the system. The User ID is used to communicate with the Security (SE) profile.

The SE profile compares the User ID entered with the User ID in the Security profile. The User ID must match a corresponding User ID in the SE profile to continue the log-in process.

The security record for the user is read and stored in the global communications work area during the log-in process. This record directs the system to prohibit or to permit the user to perform specific functions. The SE record contains indicators that allow:

■ **Access**   Anyone with an SE record can have access to R★STARS. However, access to certain information and/or functions may be restricted.

■ **Inquiry only** Users with this level of security can review those Financial Tables and other Tables as indicated on the SE record, but cannot update the Tables.

■ **Inquiry and** Users with this level of security can perform Accounting Data Entry and/or
  update   Profile Maintenance for the functions identified on their SE record.

■ **Inquiry and** Operators with this level of security may change and process transactions
  update for even if the document has already been approved.
  approved
  documents

The security manager of each agency determines who will have which level of security on the system. The security manager will request the system security officer to update the SE profile with any new information. Once a SE record has been established for a user, the user may access and perform only those activities coded on his/her record.

R★STARS users must pass all of the access and application security tests before being permitted to view the News screen and Menu screens. The News screen provides current information about the status of the system for functions that are subject to agency control. All users should read the information contained in the News screen before continuing to the Menu screens. The menus display the on-line functions which are available to the user. This is the starting point for entering data or inquiring about information contained in R★STARS.

96A and 96B Security Profile

The Security profile is divided into two screens, 96A and 96B. The 96A Security profile controls the User Level Security and Action Level Security capabilities of the system, while the 96B profile controls the Function Level security of the system.

Capabilities of R★STARS security is discussed in the following pages.

User Level Security

The 96A Security profile identifies the agencies for which users may perform system functions. Whenever users perform profile maintenance or enter accounting transactions, they are limited to accessing and updating data for the agencies identified in their security record. If further organizational restriction is desired for an operator, this may be accomplished by using the two security organization level codes. This technique is explained in more detail in the coding instructions at the end of this section.

Action Level Security

The 96A Security profile includes several indicators which allow or restrict the performance of processes. Action Level Security includes control over such functions as entering accounting transactions, which edit modes are allowed, releasing batches, entering various Disbursement Method indicator values, and restricting access to day or time of day and other miscellaneous activities. Each of the categories of Action Level Security is discussed below.

Each user has a security agency, which is the default agency on Accounting Transactions, Profile Maintenance and Financial Inquiry screens. Accounting Transaction security may be limited to inquiry only, entering and changing accounting transactions for the security agency or range of agencies, or entering and changing unapproved transactions and changing approved transactions. Additionally, a user can be restricted as to which edit mode is allowed to enter the accounting transactions.

Releasing batches is controlled by the release flag where users are given authorization to or restricted from releasing batches on-line.

Payment processing is controlled, in part, by the Disbursement Method indicator, which determines whether a payable transaction will be placed on hold, released immediately for warrant writing, or expedited if a manual warrant has been written. This indicator controls which DMI is allowed to be entered by the user on the accounting transaction.

Security controls the hours and days that each user has access to R★STARS. The allowable work days and allowable work hours for each operator are identified in the Security profile. If a

user attempts to access R★STARS outside the allowable work day and start and end times, they will receive a "Restricted Access" error. Allowable access is only valid when the system is up and running (e.g., not down to run batch, etc.).

Each user can be restricted to weekdays only, weekends only, or all days. The system uses the system date to perform the edit. The D61 Current Date profile entry for the system is reviewed to determine if the day is a weekday or weekend. The system determines this based on the Type of Day indicator in the D61 Current Date profile.

Each user can be restricted as to which bank codes can be accessed. A bank code default is also available for use and is checked against the D56 Bank ID profile for validity.

The Work Hour Range fields of the SE profile indicate the hours of the day in which an operator can access the system. The work hour range includes a 4 digit start and a 4 digit end time. The edit is based on a 24 hour clock. For example "0000 - 2400" indicates that a user can use the system anytime (subject to day security). A range of "0800 - 1700" indicates that a user can access the system from 8:00 a.m. through 5:00 p.m. However, the time edit is not continuously validated. The edit occurs only upon initial access to the system. Therefore, a user successfully logged on will not be disconnected from the system based on the time edit. The time edit is subject to successfully passing the valid day edit, discussed above.

Printer IDs are available for several printers to control where the printing of local payments, deposit slips, and receipts are printed. A default printer field is available to assign a default printer for a user.

Except for the limitations that may be placed on entering Accounting Transactions, all Action Level Security functions may be performed by a user for any agency which equals the security agency, batch agency, or an agency which falls within the range of agencies.

Other miscellaneous indicators in the 96A profile include Prior Month and Prior Year Posting indicators, and default action code agency and action code. The coding instructions in the next section provide additional details.

Function Level Security

The 96B Security profile indicators identify the level of access permitted for each on-line function. Most of the screens have their own indicator in the 96B profile which can contain the following values:

- **Space** — No access to that particular profile
- **0** — Inquire only
- **1** — Inquire, Add, and Change
- **2** — Inquire, Add, Change, and Delete
- **3** — Inquire and Add

The Delete restriction is only applicable to the profile maintenance. A system manager may want to restrict the ability to delete profiles to a limited number of users.

Transaction Security and Action Code Security

The Security profile also identifies each User ID to a user class. The two digit user class codes are defined in the D66 User Class profile. Each class of users may have up to seven transaction codes (T-Codes) which define individual T-Codes or ranges of T-Codes that can be input by the operator and seven action codes which define individual action codes or ranges of action codes that can be input. The agency security manager should consult the D66 profile before assigning operator classes to new R★STARS users.

The following pages list the screen IDs and titles that are defined for security access on the 96B Security profile screen. The coding instructions for these profiles are discussed in the next section.

Screen IDs

ID	A/C	TITLE	ID	A/C	TITLE
D01	C	OBJECT	D50	C	PAYMENT DISTRIBUTION TYPE
D02	C	AGENCY	D51	C	ERROR CODE
D03	A	ORGANIZATION CODE	D52	A	FUNCTION CODE
D04	A	PROGRAM CODE	D53	C	TITLES
D05	C	BALANCE TYPE	D54	C	SYSTEM PARAMETERS
D06	A	PROJECT TYPE	D55	C	PAYMENT PROCESSING
D07	C	GAAP GL SUBCLASS			CONTROL
D08	C	GAAP SOURCE/OBJECT	D56	C	BANK ID
D09	C	COMPTROLLER SOURCE/GRP	D57		**(not used in Michigan)**
D10	C	COMPTROLLER OBJECT	D59	A	CURRENT DOCUMENT NUMBER
D11	A	AGENCY OBJECT			INCREMENT
D12	C	AGENCY GROUP	D60	A	PROJECT GROUP
D13	C	GAAP GL ACCOUNT CATEGORY	D61	C	CURRENT DATE
D14	C	GAAP GL ACCOUNT CLASS	D62		**(not used in Michigan)**
D15	C	APPROPRIATION GROUP	D63	C	DEVICE ID
D16	C	GAAP CATEGORY	D64	C	REPORT CONTROL
D17-D18		**(not used in Michigan)**	D65	C	GAAP SUBCLASS
D19	A	PCA GROUP	D66	C	USER CLASS
D20	C	GAAP FUND GROUP	D67	A/C	GL TABLES CONTROL
D21	C	GAAP FUND TYPE	D68	C	GAAP SUBFUND
D22	C	APPROPRIATED FUND	D69		N/A
D23	A	FUND	D70	C	ABA
D24	C	GAAP FUND	D71	C	GAAP FUNCTION
D25	A	AGENCY OBJECT GROUP	D72	C	BANK ACCOUNT NUMBER
D26	A	AGENCY CODE 1	D73-D79		N/A
D27	A	AGENCY CODE 2	D80	C	OTHER SYS COMP OBJECT
D28	A	GRANTOR	D81-D89		N/A
D29		**(not used in Michigan)**	D90-D91		**(not used in Michigan)**
D30	C	PURGE CRITERIA	D92		N/A
D31	C	COMPTROLLER GL ACCT	D93-D97		**(not used in Michigan)**
D32	A/C	AGENCY GL ACCOUNT	1		**(not used in Michigan)**
D33-D34		**(not used in Michigan)**	2		N/A
D35	C	GRANT TYPE	3		N/A
D36	A	AGENCY CODE 3	4A-8		**(not used in Michigan)**
D37-D38		**(not used in Michigan)**	9		N/A
D39	C	STATE FUND GROUP	10	C	MENU CONTROL **(in System**
D40	C	GRANT CATEGORY			**Management Guide only)**
D41	C	PROJECT CATEGORY	11-16		N/A
D42	A	PROJECT NUMBER	17-18		**(not used in Michigan)**
D43	C	PRE-AUDIT SELECTION &	19		N/A
		SAMPLING CRITERIA	20	A	APPROPRIATION NUMBER
D44	A	ACTION CODES	21		N/A
D45-D46		**(not used in Michigan)**	22	A	COST ALLOCATION **(forthcoming**
D47	A	GRANT NUMBER			**w/Release 98-2)**
D48	A	GRANT OBJECT	23	C	COST ALLOCATION TYPE
D49	C	PAYMENT MESSAGE			**(forthcoming w/Release 98-2)**

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ID	A/C	TITLE	ID	A/C	TITLE
24	A	INDEX CODE	61	A	AGENCY BUDGET RECORD
25	A	AGENCY CONTROL	62	A	APPROPRIATION RECORD
26	A	PROGRAM COST ACCOUNT (PCA)	63	A	CASH CONTROL RECORD
27	A	PROJECT CONTROL	64	A	DOCUMENT RECORD
28A	C	TRANS CODE DECISION	65	A	GENERAL LEDGER RECORD
28B	C	TRANS CODE DESCRIPTION	66	A	GRANT FINANCIAL INQUIRY
29	A	GRANT CONTROL	67	A	GRANT TRANSACTION INQUIRY
30-31		**(not used in Michigan)**	68		**(not used in Michigan)**
32	A	DOCUMENT TRANSMITTAL	69	A	AGENCY/FUND RECORD
		MAINTENANCE	70	A	TRANSMITTAL INQUIRY
33	C	DOCUMENT CONTROL	71-76A	A	**(not issued)**
34	A	AGENCY VENDOR	77	A	INDEX SELECTION
35	C	BATCH TRACKING	78	A	PCA SELECTION
36		**(not used in Michigan)**	79	A	COMPTROLLER OBJECT
37	A	DOCUMENT TRACKING INQUIRY			SELECTION
38	A	MULTIPLE DOCUMENT	80	A	PROJECT FINANCIAL INQUIRY
		TRACKING	81	A	AGENCY OBJECT SELECTION
39	A	APPROVALS BY DOCUMENT	82-83		**(not used in Michigan)**
40	A	APPROVAL BY TRANSMITTAL	84	A	ACCOUNTING EVENT RECORD
41	C	DISBURSEMENT MAINTENANCE			INQUIRY
42	A	LOCAL PAYMENT REQUEST	85	A	VENDOR TRANSACTION
43	C	1099 INDICATOR CHANGE			INQUIRY
44	A	SINGLE PAYMENT	86	A	DOCUMENT TRANSACTIONS
		CANCELLATION	87	A	CUMULATIVE VENDOR INVOICE
45	C	DOCUMENT/PAYMENT RANGE	88	A	CUMULATIVE VENDOR PAYMENT
		CANCELLATION	89	A	SUMMARY GENERAL LEDGER
46	C	PAYMENT REWRITE/DUPLICATE			ACCOUNT INQUIRY
47A	C	WARRANT STATUS	90	C	NEWS/HELP
		MAINTENANCE	91	A	REPORT REQUEST
47B	C	EFT STATUS MAINTENANCE	92	A	**(not issued)**
47C	C	PAYMENT STATUS APPROVAL	93	A	RECURRING TRANS REQUEST
		LISTING	94	A	AGENCY MESSAGE
47D	C	PAYMENT STATUS	95	A	REPORT DISTRIBUTION
		MAINTENANCE HISTORY	96A	C	SECURITY
48	C	PAYMENT REDEMPTION ERROR	96B	C	SECURITY
		FILE	97	C	SYSTEM MANAGEMENT
49		**(not used in Michigan)**	98-100		N/A
50	A	DEPOSIT REDEMPTION ERROR	101	C	DEPOSIT VALIDATION SCREEN
		FILE	102-103		**(not used in Michigan)**
51	C	SYSTEMWIDE VENDOR MAIL	104-108		N/A
		CODE	109	A	CASH RECEIPT TABLE STATUS
52	C	SYSTEMWIDE VENDOR	110-514		N/A
53	A	AGENCY DOCUMENT CONTROL	515	A	INVOICE DETAIL
54-55		**(not used in Michigan)**	516		**(not used in Michigan)**
56	A	PROJECT TRANSACTION INQUIRY	517		N/A
57	A	CASH CONTROL SUMMARY	518	A	SPLIT TRANSACTION INQUIRY
58	A	AGENCY/FUND SUMMARY	519-539		N/A
59	A	VENDOR DOCUMENT INQUIRY	540		**(not used in Michigan)**
60		N/A	541-549		N/A

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ID	A/C	TITLE	ID	A/C	TITLE
550	A	RECURRING TRANSACTIONS	554A		**(not used in Michigan)**

*   A — Agency Defined
     C — Centrally Defined

96A SECURITY PROFILE INPUT CODING INSTRUCTIONS

Control Key

■ **User ID**   Enter up to eight character user ID. The user ID is assigned by the System Manager for on-line access.

■ **User Class**   Enter the two digit user class. This must exist in the D66 User Class profile. Each user class identifies up to seven transaction codes, or ranges of transaction codes and seven action codes, or ranges of action codes, the user may use.

User Level Security

■ **Agency**   Enter the three character agency code, which identifies the agency for which the user may perform system functions. It must be '000' or exist in the D02 Agency profile. (This is the batch default agency, and is known as the batch agency).

If the Accounting Transaction indicator is '2' or '4', then the operator will be allowed to access multiple agencies in Agency Range 1 and Range 2. If the accounting transaction code is '1' or '3', then the operator will be allowed access to the agency coded in the security agency field below.

If further restriction is desired both security organizations must be coded. These fields are only used if an operator has access to a single agency, and if the user's activities need to be restricted to an organization level lower than agency. This will limit reporting, transaction input, and financial inquiries where agency and organization code is in the key.

■ **Name**   Enter up to a 20 character user name.

Action Level Security

■ **Accounting Trans**   Enter the one digit Accounting Transaction indicator. The valid values are:

Blank — No access to Accounting Transactions.
0 — Inquire only for Security Agency, Batch Agency, or range of Agencies.
1 — Entry and changes allowed for Security Agency and Batch Agency.
2 — Entry and changes allowed for Agencies specified in Agency Ranges.

3 — Same authorization as '1' plus ability to change transactions on approved documents for Security Agency.

4 — Same authorization as '2' plus ability to change transactions on approved documents for Batch Agency, Security Agency and Agencies specified in Agency Ranges.

■ **Batch Edit Mode**   Enter the allowable batch edit modes for the user:

0 — User can only use Edit Mode of '0'. Transactions are captured, but not edited or posted until released to a batch cycle.

1 — User can use Edit Modes of '0' or '1', default is '1'. Performs data edits on-line, but does not post until released to a batch cycle.

2 — User can use Edit Modes of '0', '1' or '2', default is '2'. Edits and posts on-line.

■ **Release Flag**   Enter the one digit release flag code. Valid values are:

0 — User cannot release batches on-line.

1 — User can release batches on-line.

■ **Disbursement Method**   Enter the one digit Disbursement Method indicator (DMI) as follows:

Blank — Cannot enter a DMI on Accounting Transactions

0 — Can enter 'H' (hold) DMI

1 — Can enter 'H' (hold) and 'M' (manual) DMI

2 — Can enter 'H' (hold), 'M' (manual), and 'R' (release) DMI

3 — Can enter 'H' (hold), 'M' (manual), 'R' (release), and 'E' (expedite) DMI

4 — Can enter 'H' (hold), 'M' (manual), 'R' (release), 'E' (expedite) and 'L' (local) DMI

■ **Agency Range 1**   Enter an agency range 1, consisting of two, three character agency codes. This identifies the agencies to which the user is restricted for entering Accounting Transactions, performing profile maintenance, viewing financial data, and changing accounting transactions on approved documents. The agency from must be less than the agency To. If the Accounting Trans Ind = 1 or 3, this field is not allowed. If the Accounting Trans Ind = 2 or 4, this field is required and must be greater than '000'. The agency range 1 must be blank if either of the Sec Org fields is entered (i.e., either agency ranges or organization codes may be entered but not both).

■ **Agency Range 2** Enter an agency range 2, consisting of two, three character agency codes. This identifies the agencies to which the user is restricted for entering accounting transactions, performing profile maintenance, viewing financial data, and changing accounting transactions on approved documents. The agency from must be less than the Agency To. If the Accounting Trans Ind = 1 or 3, this field is not allowed. If the Accounting Trans Ind = 2 or 4, this field is optional, but Agency Range 1 is required. The agency range 2 must be blank if either of the Sec Org fields is entered.

■ **Work Hour** Enter the range of hours that the user can access the system. Maximum range allowed is: 0000 - 2400

■ **Work Day** Enter the Work Day indicator code:
W — Week day access only
E — Week end access only
A — Any day access

■ **Bank Code** Enter a one character bank code I/E as follows:
I — Include
E — Exclude
This field is used to restrict bank codes to certain users.

■ **Bank Code** Enter up to 10, three character bank codes or bank code ranges. Each bank code entered must exist in the D56 Bank ID profile. A combination of bank codes and ranges of bank codes may be utilized. Each code or range of codes must be separated by a comma, and each bank code range must be entered with a dash between the two bank codes in the range.

■ **Security Agency** Enter a three digit security agency, which must either be '000' or exist in the D02 Agency profile. (This is the default Agency for Accounting Transactions, Profile Maintenance and Financial Inquiry.) If the security agency is not '000' then it defaults to the financial agency field on Transaction Entry screens.

■ **Security Org** Enter a four digit security organization code that identifies the organization within the agency where access is desired. The organization code must exist in the D03 Organization Code profile. If entered, the user is restricted to the organization represented in the organization code and all levels below that organization code. Additionally, the security agency must be entered. The security organization must be blank if Agency Range 1 or Agency Range 2 is entered.

■ **Security Org**   If an additional organizational restriction is required, another security organization code can be entered in the second security organization field. The security organization must be blank if Agency Range 1 or Agency Range 2 is entered.

■ **Bank Code Default**   Enter the three character bank code default. The bank code entered must exist in the D56 Bank ID profile.

■ **Action Code Agency**   Enter a three character default action code agency. Must be '000' or in the D02 Agency profile. If the security agency is not '000', and the D44 Action Code Level Ind (from the Default Action Code below) is not 'B', this field must equal the security agency or batch agency, fall within the range of Agencies or be left blank. If the default action code is blank, action code agency must be blank. If action code is entered, action code agency must be entered. The action code agency and action code combination are used as defaults on the batch header during data entry and are recorded in the Document Tracking records associated with a document (if the document type is tracked) when it is entered.

■ **Action Code**   Enter a three character default action code. If entered, must exist in the D44 Action Code profile. Both default action code agency and default action codes must be blank or both must be entered.

■ **Printer IDs**   Identifies the printers used in remote printing. They must exist in the 63 Device ID profile.

■ **Default**   Identifies the default printer used for remote printing.

■ **Local Payment**   Identifies the local payment printer used for remote printing.

■ **Deposit Slip**   Identifies the deposit slip printer used for remote printing.

■ **Receipt**   Identifies the receipt printer used for remote printing.

■ **Prior Mo Post Ind**   Enter the one digit Prior Month Posting indicator to determine whether the user can post transactions to the prior accounting month:
Y — The user is allowed to post transactions to the prior accounting month.
N — The user is not allowed to post transactions to the prior accounting month.

■ **Prior Yr Post Ind**   Enter the one digit Prior Year Post indicator to determine whether the user can post transactions to the prior year:
Y — The user is allowed to post transactions to the prior year.
N — The user is not allowed to post transactions to the prior year.

■ **Fund Override**   Enter the Fund Override indicator:
Blank — No fund override allowed.
0   — User may override Agency level fund errors on Financial transactions authority to use Fund Override should be restricted.
1   — User may override Agency and systemwide level fund errors.
2   — User may override Agency budget, grant, project and appropriation, encumbrance and accrual edits only.

■ **View Bank Info**   This element controls whether vendor bank information is displayed on the vendor profiles. Enter the one character View Bank Information indicator:
Y — Vendor bank information is displayed.
N — Vendor bank information is not displayed.

■ **Status Code**   Enter a one character status code as follows:
A — Active
I — Inactive
This code will default to an active status if not entered. It may be used to inactivate records no longer in use.

■ **Eff Start Date**   Enter the eight digit effective start date (MMDDYYYY format), which identifies when the record becomes effective. This field can be left blank, which will cause the record to be immediately available.

■ **Eff End Date**   Enter the eight digit effective end date (MMDDYYYY format), which identifies when the record is no longer effective. This field can be left blank.

■ **Last Proc Date**   This is system generated.

```
S96A 2.0                    R★STARS ACCOUNTING          08/15/94 12:00 PM
 LINK TO:                     SECURITY PROFILE                     FACS

USER ID/CLASS:          AGENCY:      NAME:

 ACCOUNTING TRANS:            BATCH EDIT MODE:
     RELEASE FLAG:        DISBURSEMENT METHOD:
AGENCY RANGES-                    WORK HOUR:
         RANGE 1:                 WORK DAY:
         RANGE 2:
ENTER UP TO 10 BANK CODES SEPARATED WITH EITHER "-" OR ",".
       BANK CODE:
 SECURITY AGENCY:          BANK CODE DEFAULT:        PRINTER IDS
    SECURITY ORG:         ACTION CODE AGENCY:          DEFAULT:
    SECURITY ORG:            ACTION CODE:        LOCAL PAYMENT:
PRIOR MO POST IND:                            DEPOSIT SLIP:
PRIOR YR POST IND:                                 RECEIPT:
    FUND OVERRIDE:    VIEW BANK INFO:     (Y/N)

                                          STATUS CODE: A
 EFF START DATE:        EFF END DATE:       LAST PROC DATE:


F1-HELP  F3-DELETE  F5-NEXT  F6-96B  F9-INTERRUPT  F10-SAVE  F11-SAVE/CLEAR
 ENTER-INQUIRE  CLEAR-EXIT
```

96B SECURITY PROFILE INPUT CODING INSTRUCTIONS

Control Key

■ **User ID**   Enter up to eight character user ID. The user ID is assigned by the System Manager for on-line access.

■ **User Class**   Enter the two digit user class. This must exist in the D66 User Class profile. Each user class identifies up to seven transaction codes, or ranges of transaction codes and seven action codes, or ranges of action codes, the user may use.

■ **Agy**   Enter the three character agency.

■ **Name**   Enter up to a 20 character user name.

Information Elements

■ **Functions**   Enter the one digit function code as follows in each field denoted by the screen ID:
Blank — No Access (will not see screen ID on menu)
0   — Inquiry Only
1   — Inquiry, Add, and Change
2   — Inquiry, Add, Change, and Delete
3   — Inquiry and Add
A value of '3' is only valid on the 34 Agency Vendor profile, the 52 Systemwide Vendor profile and the 51 Systemwide Vendor Mail Code profile.

■ **Eff Start Date** Enter the eight digit effective start date (MMDDYYYY format), which identifies when the record becomes effective. This field can be left blank, which will cause the record to be immediately available.

■ **Eff End Date**   Enter the eight digit effective end date (MMDDYYYY format), which identifies when the record is no longer effective. This field can be left blank.

■ **Last Proc Date**   This is system generated.

```
S96B VER 2.0                 R★STARS ACCOUNTING        08/15/94 12:00 PM
 LINK TO:                      SECURITY PROFILE                     FACS
 USER ID/CLASS:             AGY:     NAME:
  D01    D02    D03    D04    D05    D06    D07    D08    D09    D10    D11
  D12    D13    D14    D15    D16    D17    D18    D19    D20    D21    D22
  D23    D24    D25    D26    D27    D28    D29    D30    D31    D32    D33
  D34    D35    D36    D37    D38    D39    D40    D41    D42    D43    D44
  D45    D46    D47    D48    D49    D50    D51    D52    D53    D54    D55
  D56    D57    D59    D60    D61    D62    D63    D64    D65    D66    D67
  D68    D70    D71    D72    D80    D90    D91    D93    D94    D95    D96
  D97    001    004    005    006    007    008    010    020    022    023
  024    025    026    027    28A    28B    029    030    031    032    033
  034    035    036    037    038    039    040    041    042    043    044
  045    046    47A    47B    47C    47D    047    048    049    050    051
  052    053    054    055    056    057    058    059    061    062    063
  064    065    066    067    068    069    070    071    072    72A    72B
  72C    073    73A    73B    074    075    076    76A    077    078    079
  080    081    082    083    084    085    086    087    088    089    090
  091    092    093    094    095    096    097    101    102    103    109
  515    516    518    540    550
  EFF START DATE: 06201994   EFF END DATE:          LAST PROC DATE:


 F1-HELP F3-DEL F5-NXT F6-96A F9-INT F10-SAVE F11-SAVE/CLR ENTER-INQ CLEAR-EXT
```

D66 User Class Profile

The purpose of the D66 User Class profile is three fold. First, it serves as a master list of all valid user class codes. When a security record is created for a user, the user class assigned to the user ID is validated against this profile. Second, it defines up to seven transaction codes, or ranges of transaction codes a class of users may or may not use. An important implication here is that when modifications (e.g. additions or deletions) are made to the population of transactions code this profile should be updated accordingly. Third, it defines up to seven action codes or ranges of action codes which a class of users is allowed to use or not allowed to use. This field should be updated when there are modifications to the D44 Action Code profile. For further information on user classes, please refer to the DMB Office of Financial Management (OFM) Security Manual.

D66 USER CLASS PROFILE INPUT CODING INSTRUCTIONS

The D66 User Class profile identifies the valid transaction codes and document tracking action codes each user class is allowed to use.

Control Key

■ **User Class**   Enter the two digit user class code.

Information Elements

■ **Title**   Enter up to a 50 character user class title.

■ **Transaction Code I/E**   Enter a one character transaction code as follows:
I — Include
E — Exclude
This field is used to restrict transaction codes to certain user classes.

■ **Transaction Codes**   Enter three digit transaction codes as single values or ranges, separated by commas. Up to seven values or ranges may be entered. The transaction code must exist in the 28A Transaction Code Decision profile if it is not entered as a range. At least one transaction code or range must be entered. If a range is entered the transaction code to the left of the separator ('-') must be less than the transaction code to the right.

■ **Separator**   Enter a one character ',' or '-' between each transaction code. A '-' is used to identify ranges. Two consecutive separators cannot be '-'.

■ **Action Code**   Enter a one character action code as follows:
I — Include
E — Exclude
This field is used to restrict action codes to certain user classes within an agency.

■ **Action Code Agency**   Enter three character action code agency as single values separated by commas or ranges. Up to seven pairs of action code agency and action codes may be entered. The same action code agency must be used in a range of action codes. The action code agency is edited against the 96A Security profile. If it is not within the security agency range or is not equal to the security organization, it must equal the security agency. The action code type in the D44 profile must be 'B', used by both agencies and central agencies.

■ **Action Codes**   Enter three character action codes as single values or ranges, separated by commas. If the action code agency is '000' the action code must be numeric; otherwise, it may be alphanumeric. The action codes entered must exist in the D44 Action Code profile if they are not entered as a range. If entered as a range the action code to the left of the '-' must be less than the action code to the right. action code agency and action code are only required if the preceding separator is '-'. action code agency and action code must both be blank or both be entered. Example: I 305 AAZ-305 AA2, 310 AAA-310 AAZ. On this example, 305 and 310 are the action code agencies and AAZ, AA2, and AAA are the action codes.

■ **Separator**   Enter a one character ',' or '-' between each action code. A '-' is used to identify ranges. Two consecutive separators cannot be '-'.

■ **Status Code**   Enter a one character status code as follows:
A — Active
I — Inactive
This code will default to an active status if not entered. It may be used to inactivate records no longer in use.

■ **Eff Start Date**   Enter the eight digit effective start date (MMDDYYYY format), which identifies when the record becomes effective. This field can be left blank, which will cause the record to be immediately available.

■ **Eff End Date**   Enter the eight digit effective end date (MMDDYYYY format), which identifies when the record is no longer effective. This field can be left blank.

■ **Last Proc Date**   This is system generated.

```
SD66 2.0                        R★STARS ACCOUNTING              08/15/94 12:00 PM
 LINK TO:                   USER CLASS PROFILE MAINTENANCE                   FACS


           USER CLASS:
                 TITLE:


      I/E (I=INCLUDE,E=EXCLUDE)
      ENTER TRANSACTION CODES SEPARATED WITH EITHER "-" OR ",".

      ENTER ACTION CODES SEPARATED WITH EITHER "-" OR ",".




                                              STATUS CODE: A
 EFF START DATE:          EFF END DATE:       LAST PROC DATE:


 F1-HELP F3-DEL F5-NEXT F9-INT F10-SAVE F11-SAVE/CLEAR ENTER-INQ CLEAR-EXIT
```

2.10 SYSTEM INPUTS

R★STARS has been designed with the flexibility to capture direct inputs from a variety of different sources. On-line data entry provides organizations with the ability to enter financial, profile maintenance, and error correction transactions on remote terminals. The system can also accept automated inputs, such as transaction entries from other systems, through an interface process.

To facilitate this process, a standardized interface procedure has been developed. All subsystems transmitting data to R★STARS must do so in a prescribed format. In effect, the system can automatically interface with any system capable of providing input records in the desired format. However, the interface capability is not available for making profile changes.

Batch data entry, through a key-to-disk or key-to-tape option, is also available through the standard interface process for organizations which utilize batch key data entry.

Regardless of the source of the transactions, all transactions are fully edited prior to posting to R★STARS financial tables. If errors are detected during this editing process, the transactions are routed to the internal transaction file for correction through the on-line system or rejected from the system.

2.11 MANAGEMENT REPORTING CAPABILITIES

One of the primary purposes of record keeping is to obtain data for reports that serve as the basis for management decision making and as a tool for evaluating past decisions. To be of maximum use, reports must be timely and accurate and must present data in an easily understood format. The primary objective of this section is to provide an overview of the system's reporting capabilities and its ability to satisfy those requirements.

The reporting capability of R★STARS is extremely flexible. Data is maintained in the various system tables at different levels of summary to facilitate management reporting and for control purposes. To provide for most of the management reporting needs, the system's financial tables contain all budgeted and actual revenue and expenditure data. These data are maintained with all of the elements of information included in the revenue and expenditure classification structure.

Reports are provided from the system's tables and can be requested by choosing different combinations of the various data elements. With this flexibility, the system is capable of satisfying the accounting related reporting requirements of most levels of financial management within an organization. As shown on page 2.11-2, information contained in the tables can be reported in one of two ways:

- **Standard Reporting** — which provides many standard financial reports required on a recurring basis. Many of the reports have multiple options for level of detail, reporting period, output media, and output destination.

- **On-Line Inquiry** — which enables the users to inquire into certain system tables in an on-line mode.

The reporting capabilities of R★STARS are discussed in Chapter 10, Reporting.

REPORTING AND INQUIRY

```
                    ┌─────────────────┐
                    │   REPORTING/    │
                    │    INQUIRY      │
                    └─────────────────┘
                             │
             ┌───────────────┴───────────────┐
    ┌─────────────────┐             ┌─────────────────┐
    │    STANDARD      │             │    ON-LINE      │
    │   REPORTING      │             │    INQUIRY      │
    └─────────────────┘             └─────────────────┘
             │                               │
     ┌───────┼───────┐                       │
┌─────────┐┌─────────┐┌─────────┐      ┌─────────┐
│  Trial  ││ Budget  ││ Revenue │      │  Table  │
│ Balance ││ Reports ││ Reports │      │Inquiries│
└─────────┘└─────────┘└─────────┘      └─────────┘
```